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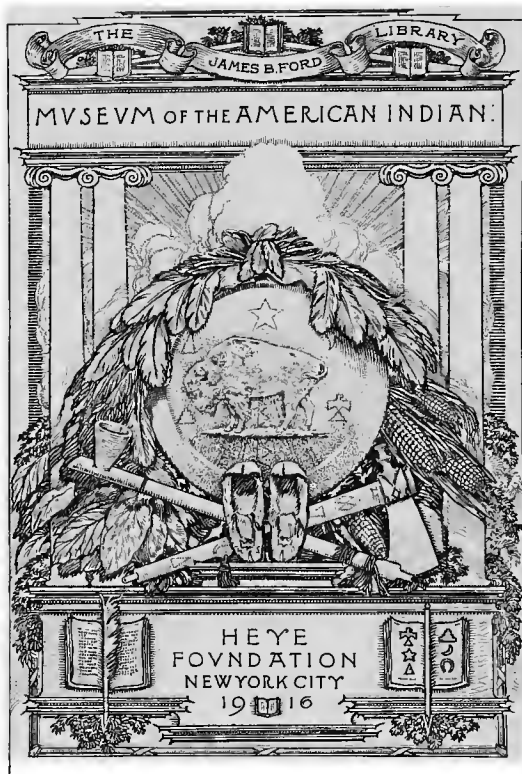
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REPORT

ON THE

HUACALS, OR ANCIENT GRAVEYARDS OF CHIRIQUI.

A PAPER READ BEFORE THE AMERICAN ETHNOLOGICAL SOCIETY, BY
J. KING MERRITT, M.D.

[Dr. Merritt was director of a gold-mine in Veraguas, and spent several weeks, in the summer of 1859, in examining and excavating the newly discovered graves—Huacals or Guacals—in the adjoining province of Chiriqui, about fifty miles north of Panama.]

IN the autumn of 1858 two Spanish creole farmers of Chiriqui, while engaged in gathering a crop of corn, accidentally discovered a golden image, which had been exposed by the uprooting of a plant. They cautiously and secretly made farther search by sinking a pit at this point, and were successful in obtaining more. With this encouragement they determined to explore the Huacal, the existence of which had been well known for years. They proceeded in this work, not continuously, but as circumstances would permit, until the 1st of May, 1859, when their concealed operations became known to the inhabitants of the vicinity. The consequence was, that by the middle of May more than a thousand persons were engaged in ransacking the graves of this Huacal, which is located in the district of Boqueron and parish of Bugaba, about twenty-five miles from David, and fifteen miles from the sea, in a direct line. The names of the fortunate discoverers are Ignacio Guerra and Victorio Pitti, who succeeded in collecting together, as admitted to me by themselves, about 130 pounds weight of golden figures, a large proportion of which, however, are more or less alloyed with copper.

Two anecdotes were related to me connected with the earlier explorations of this Huacal. One was, that a lad, the son of Ignacio Guerra, seemed to possess the "divining power." It is said he always selected the grave to be opened, and was almost uniformly successful in the selection of a "gold-bearing" one; while perhaps the next adjoining, although carefully explored by other parties, would yield only pottery. This boy, it is stated, would proceed in advance of his father, "pro-

specting;" and, having chosen the grave, would say, with perfect nonchalance, "Padre mio! aqui está una Huaca rica: ella tiene muchas figuras del oro." [Father, here is a rich grave; it has many golden images.] The other anecdote related to the "confidence" operations of the priest of the parish. He pretended to possess the "divining rod," a relic of some gold-seeker of olden time. With this, it is said, he would proceed to the Huacal, followed by a throng of eager grave-diggers, and would designate to each the golden sepulchres for the unselfish consideration of one third of the yield. His rod and *modus operandi* were more simple than ingenious. The rod was an antique steel bar. This was suspended near its middle by a small cord, which was grasped in his outstretched hand. Upon arriving at a suspected locality, he would give the bar a rapid twirl, and begin to mutter an "Ave" or a "Benedicite" in a hurried manner. When the bar ceased to gyrate, the longer end, depressed by its greater weight, indicated the desired spot. This profitable farce was practiced by the priest for a few days, until the arrival of some intelligent and influential persons from David, who exposed the swindle.

This Huacal of Bugaba had been quite thoroughly explored by the first of August, and people were then directing their attention to others in the vicinity; but the heavy rains, which daily occurred, prevented any considerable progress in many, and in some entirely stopped the operations. Consequently the Huacal of Bugaba had yielded nearly all the golden images up to this date, which I have estimated could not have been worth more than \$50,000. This calculation is based upon their metallic value merely, and not upon their fancied valuation as curiosities.

The Huacal of Bugaba embraced an area of twelve acres, but was divided into two sections—by a slight depression extending in an east-and-west direction—in which not a single grave has been encountered. This depression of the surface varied in width from eighteen to ten yards, toward the east. The two sections were respectively five and seven acres, and were located on slightly elevated eminences, about four hundred yards from a small river, the course of which is northeast by east at this point. The rise from the river banks to the Huacal is very gradual, except at the northern boundary, which is somewhat abrupt, and around which the river turns toward the east. The general direction of the Huacal is north and south; and the greater portion of the graves were found on the western and southern slopes. There did not appear a general regularity in the position of the Huacas, or graves, but frequently there would occur several side by side. The distance between the grave-pits varied from nine to fifteen inches at the more

crowded portions of the Huacal. The universal direction of the quadrangular Huacas is north and south by the polar star.

There are two forms of Huacas or graves—the oval and quadrangular; and their mode of construction is an interesting matter for consideration. I, with a small party of peons, examined carefully and systematically one of the former and several of the latter description; and besides, saw a large number of both varieties opened by parties in the vicinity. The material uniformly employed in the construction of the sepulcher proper was flat and rounded river stone. The oval grave-pits were from four and a half to six feet deep, and from three to four feet in their largest diameters. A wall of the rounded river stone, two and a half to three feet high, lined the grave-pit at the bottom, after the manner of a modern well. From the top of this wall to the surface the entire area of the grave-pit was closely packed with rounded river stone. Within the limits of the wall, which seemed to be the tomb proper, were found principally the golden figures, and the vessels of pottery, etc. The greater portion of the oval or circular Huacas were located in the northern and western sections of the burial-ground; and, as a general rule, yielded the most figures of gold and the finest specimens of pottery. The relics in these were found usually at the eastern and northern sides; and the gold figures sometimes were located, it is said, in the crevices of the wall—but in no instance in the earthen jars associated with them. The circular graves, being confined to the slopes of the Huacal, were more or less covered by the wash from the elevated sections of the Huacal, so that the top stones of the package were in many cases nearly a foot beneath the surface. No vestige of the human body was discovered in the oval Huacas; but a black loam occupied the spaces between the relics and the stone package. Occasionally earthen vessels were found in the stone package near the surface. The quadrangular Huacas were constructed in two modes. In one case the grave-pit was lined by walls of rounded river stone about one third the distance to the surface; and from the top of these walls the entire area of the grave-pit was closely packed with river stone, as in the oval grave. Within the limits of these walls, and in close proximity to the bottom of the grave-pit, were found most of the relics contained in them. These Huacas were larger and yielded more gold images and finer pottery than the other variety of the quadrangular grave, and were in juxtaposition with the oval graves, occurring interspersed with them in the northern and western sections of the Huacal, but abounding principally in the southern portion of the ground. Some of these Huacas were nearly six feet deep, especially those situated in the depressed sections of the Huacal, and the area of the grave-pit measured frequently seven by four and a half feet.

In these the relics were usually found near the bottom, at the northern and southern extremities, and more or less on the eastern side. The gold figures most frequently were located about one fourth of the distance from the head to the foot of the grave-pit, and in the medial line. In these Huacas, also, earthen vessels were encountered in the stone package near the surface, and generally at either extremity.

The other variety of the quadrangular Huaca, although poor in relics, was more artistically and carefully constructed, and in a better state of preservation; for in many of them everything was encountered "*in situ*." In these a vault existed, which was formed of flat river stone, and was of the requisite size to contain a human body in the supine position, so far as the length and breadth are considered, but in the height giving ample space for the introduction of the earthen relics. These Huacas were located mostly on the more elevated portion of the Huacal, and in the southern and eastern sections. A grave-pit had been sunk about three feet deep and six and a half by four feet in area; and then a lesser pit, by eight to ten inches on all sides, was farther sunk to the additional depth of about two feet. This smaller pit was lined by flat stones placed edgewise, which were held in position by other flat stones resting flatwise upon the upper edges of these and the surface of the recess in the sides of the grave-pit. The floor of the vault was not paved, but presented a hard, pebbly clay surface, with two depressions frequently, one at either extremity, and corresponding with the probable positions of the occiput and the heels of the body. The cover to the vault was composed of flat stones, quite closely adjusted, and sufficiently overlapping the sides to be firm, and not liable to cave in from the variations of position of the sides, consequent upon subsequent settlements of the earth and stone from natural causes. From the cover of the vault to the surface, the entire area of the grave-pit was closely packed with river stone, somewhat larger than ordinary paving-stone. In these Huacas the relics were also found mostly in the vault, at the head and foot, and on the east side. So far as my experience goes, earthen-ware only was found in these, although I was told that a few had contained the smaller gold figures. Specimens of pottery were encountered also in these, at either extremity of the stone package, immediately above the cover of the vault. The location of these vaulted Huacas, being the more elevated section of the burial-ground, and the vaults also preserving their outlines, the stone package of most of them was slightly raised above the general surface. A black loamy earth occupied all the graves proper, or the original position of the body in it.

It would seem, from the facts I have stated, that the gold-bearing graves were those which were ruder in their construction, and which

occupied, to some degree, a particular section of the Huacal, although the limits of this were not well defined. The golden ornaments were not found in many successive Huacas, even at the richest points of the Huacal. Pottery, however, was encountered more or less in every Huaca. It is reported that in other Huacals, in the vicinity of Bugaba, traces of human hair have been discovered; but in those of Bugaba, which I explored carefully, no such evidence of the body was encountered. I have, however, the enamel of a molar tooth, taken from a grave in a Huacal, near that of Bugaba.

Most of the gold figures taken from the Huacas of Chiriqui were probably ornaments, worn by the person buried, and were suspended about the neck. There are, apparently, some exceptions to this. Circular thin plates of fine gold were found, one surface of which uniformly presented a worn appearance. They are all perforated by two holes, about an inch and a half from each other and the margin. These holes resemble the ragged puncture which would be produced by a modern nail, driven from the worn side; and there is no evidence of friction on the edges of these apertures. Another gold figure resembles the iron thimble used by riggers at the end of a rope, to which is attached a ring or hook. In some Huacas have been found a great number of thin, laminar pieces of fine gold, of various shapes, such as square, oblong, triangular, and rhombic, which weighed from 5 to 30 grains, Troy.

The golden ornaments are, for the most part, representations of the natural objects peculiar to that region. Many of them, however, are grotesque and fantastical imitations and combinations of such objects, and a few seem to be efforts of fancy or superstition.

Nearly all the golden figures are alloyed with copper, which was the only metal used for such a purpose in this section, apparently. Some of the better executed figures are scarcely more than eight or ten carats fine. This alloy of the figures is artificial. The figures have been "cast" generally, and some have been finished to their existing shapes by subsequent beating. The largest golden figure, of high degree of purity, found in the Huacal of Bugaba, weighed between eleven and twelve ounces. The specimens of pottery found associated with the gold figures are generally larger and of a finer quality than in the other Huacas.

To the antiquarian these possess a great interest, as they afford some idea of the domestic habits and the degree of civilization attained by that ancient people, of whose history we as yet know nothing. The specimens which I have seen, and a few that I have brought from Chiriqui, exhibit a high degree of advancement in the most difficult art of pottery—forms as symmetrical and graceful as any of classic or mod-

ern dates. The glazing and painting of some are in a wonderful state of preservation, the colors being bright and distinct; and many are entirely unaffected, in their composition, by the lapse of time.

There is a domestic utensil frequently occurring in the Hnacas, worthy of particular notice. It is the so-called corn-grinder, which seems to be carved from stone. It most frequently bears a resemblance to a tiger, with its body expanded to an oval tablet form, and its tail curved so as to be connected with one of the posterior legs, which serves as a handle. Another form, quite rare, is a circular tablet, supported by figures of monkeys, arranged regularly in a circle, and standing upon a base ring, the entire piece carved from a block of stone. There was a peculiar fancy among that people to introduce pellets of the same material into cavities, where such might occur properly in the molding of the various articles of pottery, or of the gold figures.

The musical instruments made of clay are very curious, and evince considerable cultivation in the musical art. They are of varied forms, but principally the figures of birds and animals.

Arrow-heads and stone instruments, resembling hatchets, were found associated in the same Huaca.

The existence of Huacals throughout the southern portion of the Isthmus and Central America has been long known to the inhabitants; but, strange to say, I have not heard of any such burial-grounds on the northern side of the Isthmus, from the lagoons of Chiriqui to the valley of the Chagres—and where they would have been discovered by the gold-seeker, who has been ransacking this section for more than 300 years. The *locale* of the Huacal appears to be the plain, valley, and upland of the Pacific side of the Isthmus.

I have received intelligence that on an elevated plateau, called Boquete, have been encountered Huacals in the forest, marked by large pillars of stone, three feet above the surface, and some ten inches in diameter. The pottery in these was very large and ponderous, and was so friable that no specimens of it could be taken out or carried without crumbling to small fragments.

BULLETIN
OF THE
AMERICAN ETHNOLOGICAL SOCIETY,
APRIL 17TH, 1860.

ON Tuesday evening, the April meeting was held at the residence of the President, Hon. GEORGE FOLSOM, who occupied the chair.

CHIRIQUI RELICS.—A letter was received from Mr. Totten, chief engineer of the Panama Railroad Company at Aspinwall, April 2d, accepting his appointment as a corresponding member, and promising to send more curiosities from the Chiriqui graveyards, particularly specimens of the stone posts or columns which have recently been found in some of them, porting the roofs. He writes:

“I was in error in stating that the images I sent you were the only stone images discovered in Chiriqui. I was so informed; but I have recently seen small ones from that locality, and also numerous stone articles, apparently household utensils, with figures of animals cut upon them, showing that the art of working stone was known to the aborigines of that country.”

DANISH ANTIQUITIES.—Lieut.-Col. W. D. Raasloff, *Charge d’Affaires* for Denmark, took his seat as a member, and presented a collection of ancient stone instruments, received from Professor Thompson, Director of the Royal Museums of Copenhagen. They were taken from ancient mounds, and were chiefly made of flint. The most highly finished is a spear-head, or perhaps a poniard, 9 or 10 inches long.

Mr. R. also presented a collection of archæological publications from Denmark, and specimens of the beautiful new coins issued by his Government for circulation in their W. Indies. They are of 1 cent, 5, 10, and 20 cents, on the American decimal system.

On motion of Dr. Wynne, seconded by Mr. Loosely (Austrian Consul-General), the thanks of the Society were presented to Mr. Raasloff and Prof. Thompson.

The President spoke in terms of admiration of the extent, value, and beauty of the Danish museums, expressed regret that they should be so far before us, in even American antiquities, for which they deserve high

praise. We should be encouraged by their example, and we have a vast field for exploration.

The President presented the two publications of the "Shanghai Literary and Scientific Society," published at Shanghai.

ARAB MANUSCRIPT.—A letter was read from Lonis Tappan, Esq., accompanying an Arabic manuscript, of several pages, from Africa, purporting to contain a history of the world, extracted from the Koran. Mr. Cotheal reported that it was so, and evidently recently written by some educated negro of Africa. It is on ruled, light blue paper, apparently American.

THE ISTHMUS.—Dr. Davis presented a letter from Mr. Hawes, of Panama, with a map containing interesting answers to questions concerning the Chiriqui graves. A law was passed by the Spanish, in 1542, claiming all gold found in *guacas* (meaning graves), which abound in Central America, New Granada, and Pern. He knows of no sculptured rocks. Mounds are numerous on the Isthmus, and some large; but none have ever been opened, except one, which has recently been dug into, and some pottery found.

A report on Gen. Herran's Chiriqui earthen relics, from the Committee on Antiquities, described the twenty-five articles of which it consists: nine tripods, ten vases, two small musical instruments, etc. The vessels, like others, in the collections of Drs. Davis and Merritt, are neatly and sometimes very gracefully formed of clay, of different degrees of fineness, few of them with any appearance of having been fused, some glazed with an unknown substance, and painted, probably with metallic oxyds, which it is desirable to have analyzed. Most of them are soon soaked through by water; but such as are glazed are water-tight. The uses of most of them it is difficult to conjecture. Several bear resemblance to Roman, Grecian, and Etruscan jars, figured by Monfaçon and others. One is nearly like a *diota*, or Grecian two-eared one, among his specimens.

Dr. Davis remarked on the historical value of ancient pottery, and said that the specimens from Chiriqui appear to have been molded upon an imitation of vegetables, fruits, shells, or other common objects of the country, and ornamented with imitations of native animals. In no instance has he found any attempt to imitate anything foreign in pottery, copper, or gold. The jars are all formed by hand, with no mark of the potter's wheel. He thinks the external and internal layers of clay, when light colored, with a black stratum between them, must have been penetrated and changed by the coloring matter applied, with or without the size or varnish spread over them.

Dr. Merritt mentioned that the natives of the Isthmus now make their rude earthen utensils of a peculiar black earth, which gives them the

appearance of iron. Some of the ancient Chiriqui jars appear to consist, in part at least, of the same. The coloring matter of that clay is probably per-oxyd of iron.

MUSICAL INSTRUMENTS.—Dr. Merritt read the report of the Committee on the Chiriqui Musical Instruments then exhibited. They are (all but one) whistles or flageolets, roundish, or in the forms of birds or beasts, from $1\frac{1}{2}$ to $4\frac{1}{2}$ inches diameter, with an air-chamber, and from 1 to 4 finger-holes. The pitch and scales of these instruments were noted in the report, and several peculiarities mentioned, distinguishing them as of a different species from all others known in ancient and modern times. The most perfect has three finger-holes to produce the notes; A. G. F. E. downward. A fourth finger-hole gives the semitones of these. By a particular process, two three lower notes are obtained. A very diminutive instrument, with two finger-holes, has a loose ball of baked clay in its air-chamber, which, when moved, varies the notes.

DIFFERENT MODES OF BURIAL BY ANCIENT ROMANS.—The President requested Dr. Gajani to repeat what he had mentioned to him on this subject; and he remarked that, after much investigation, he was convinced that some high Roman families adhered to the modes of interment practiced by their ancestors; those of native or Etruscan origin interring the body, and those of Latin or Trojan descent (as they called it), burning it. The two races made their tombs and catacombs on opposite sides of the Tiber. The tomb of the Scipios was originally on the Vatican Hill, but removed across the river, where it has been discovered in modern times. Dr. G. believes that none of the Etruscan vases ever contained human remains. They are not large enough, and nothing has ever been found in any of them. They were probably mere ornaments. This view is opposed to the long received opinion that all the Romans, for a time, interred their dead, and afterward universally adopted the custom of burning them. The Julian family and that of the Scipios appear to have been of different races. Campana, who first entered the tomb of the Scipios, affirmed that he saw the form of a man's body on a bier, which soon crumbled and disappeared under the effect of the air. The bier, being of iron, remained. Six pounds weight of gold was found.

Judge Daly remarked, that he had seen marks of fire on some of the remains in Etruscan tombs. Dr. G. replied, that these might have been the contents of later tombs in the same place.

The Society were informed that the Legislature of the State of the Isthmus have a bill before them for regulating the exploration of graves in Chiriqui, etc. An amendment was proposed by Governor Obaldia, requiring licenses from the Government for short terms, and securing proprietors of land from loss and damage.

BULLETIN
OF THE
AMERICAN ETHNOLOGICAL SOCIETY,
MAY 8TH, 1860.

THIS Society held their May meeting on the 8th, at the residence of the Treasurer, ALEX. J. COTHEAL, Esq., Hon. GEORGE FOLSOM, the President, in the chair.

LETTERS.—The Corresponding Secretary, E. G. Squier, Esq., read a letter from Norton Shaw, Esq. Letters were also read from Judge Charles P. Avery, of Flint, Michigan, consenting to prepare a paper on the antiquities of that State, and sending a report of the Michigan Historical Society: From Lieutenant-Colonel Raasloff (the Danish minister), accompanying an old palm-leaf book from Tranquebar, a donation from Councillor Thomsen, Director of the Danish Museums. From Alexander S. Taylor, Esq., Monterey, California, to Mr. Cotheal, mentioning that he has obtained a grammar of the Nutsun language, and a large vocabulary of that California Indian tribe; also catechisms in languages spoken at the missions of Soledad and San Antonio. The first he sent to the Smithsonian Institute in 1856. The *California Farmer* commenced the publication of his series of articles on "Indianology" in February last.

Donations were received from Charles F. Loosey, Esq. (Austrian Consul-General), of the seven large volumes of the Imperial Royal Geographical Society (from 1857 to '59), and three of the Imperial Royal Geological Institution (from 1858 to '59), Dr. Weitenweber's pamphlets on Arabian Coffee, on the Life and Works of Dr. Mold, and on M. Ficinius's *De Vita Studiosorum*.

From Mr. Figanieri (Portuguese minister), two numbers of the *Bulletins and Annals of the Portuguese Ultramarine Council*. From Rev. J. L. Wilson, his pamphlet on the Slave Trade, and *The Israelite Indeed* (monthly), from the editors.

THE PALM-LEAF BOOK, sent by Councillor Thomsen, contains about 200 thin strips, 1 inch wide and $16\frac{1}{2}$ long, laid upon each other, and fastened by two rods passing through them and also through two pieces of

split canes. They are neatly written on both sides in very small Tamil characters. A vote of thanks was passed to the donor.

BOOKS PRESENTED AT THE APRIL MEETING.—Mr. Raasloff presented the following:

1. Memoirs of the Royal Society of Northern Antiquaries for 1843 and '44; a paper on the Construction of Halls of the Giants, in Denmark and elsewhere, by the President of the above-mentioned Society, viz.: His Majesty Frederic VII., King of Denmark, 1857. Lord Ellesmere's Guide to Northern Archæology, for the use of English readers. London, 1848. Also several bulletins.

[Notices of these works, and also of the following, have been prepared for some future meeting of the Ethnological Society.]

The Journal of the Northern Branch of the Royal Asiatic Society, printed at Shanghai in 1859, and presented to this Society in April, by Mr. Folsom, contains very interesting articles:

1. On Formosa, by Mr. Swinhoe, British Consul at Amoy.

2. On the first course of Physical Lectures ever delivered in Japan by a foreigner. By Dr. Meerdervoort.

3. On Japanese Manners, Language, etc. By S. W. Williams, LL.D., Secretary of the American Legation, and a member of the Ethnological Society.

4. Musical Notation of the Chinese. By the Rev. Mr. Syle. The Chinese express notes by nine characters, written, like their ordinary words, in perpendicular columns downward. *In alto* is expressed by a slight dash at the end of the character.

FORMOSA.—Mr. Swinhoe, British Consul at Amoy, mentions that many Chinese, who reside on the coasts of Formosa, are remarkably hospitable and kind; while a very numerous race of cruel savages, inhabiting the mountains, are jealous and bloodthirsty. These often wear only a strip of cloth, but carry swords and fine matchlocks. There are some good roads, especially those leading to mines of coal and sulphur, which are worked by Chinese. Several villages were seen of "tamed savages," who are very peaceable and friendly. These people call a man *Larrat*, woman *Tarroogan*, son *Wannak*, daughter *Ree-ah*, water *Lalom*, head *Ooroo*, etc.

"These domesticated savages," says Mr. S., "are exceedingly civil and good-natured—far more so even than the Chinese, and showed us about their tree-ensconced residences. Their houses are built off the ground, on posts, and have boarded floors. The women are far better off than the wild, savage females, being neatly dressed, with ornamented head-dresses. There is a foreign trade with the wild people, who exchange rice for salt."

CURIOSITIES FROM MICRONESIA.—Mr. Gulick, of the Union Seminary, presented, in the name of his brother, Dr. Gulick, of the Micronesian Mission, a heavy adze, neatly made of some very large sea-shell, with a wooden handle, for digging out canoes; and specimens of woven articles of dress, and ornaments of palm-leaf fiber. He gave very interesting particulars of the modes of manufacture in different groups of islands, contrasting the varieties of work and style, and showing the difference between these and the tapa cloths of Polynesia. A specimen of coarse tapa from Micronesia was strengthened by numerous long threads sewed through it. Mr. Gulick was requested to communicate in writing the new and interesting facts which he mentioned.

MICRONESIAN LANGUAGES.—Reference was made to the recent publications by Dr. Gulick of "Notes on the Grammar of the Ponape Dialect of Micronesia," as one of those gratifying late examples of able, laborious, discriminating, analytical investigation of unwritten languages which do so much honor to certain scholars and missionaries, and open to the world surprising peculiarities, interesting in themselves, and in comparison with the most cultivated tongues of modern and ancient times. The Honolulu *Friend*, in exhibiting some of the delicate peculiarities in the speech of natives of Micronesian groups, declares that they differ among themselves so much that they are unintelligible to each other, and perhaps should be regarded as speaking, not dialects, but distinct languages.

NUMEROUS TUMULI IN CUBA FIRST REPORTED BY MR. SQUIER.—Mr. Squier, who has recently returned from Cuba, read a notice of tumuli observed by him near the railroad from Havana to Cardenas, sometimes more than one hundred being in sight at once, amounting in all to thousands. They are of moderate size, and apparently sepulchral. He has taken steps to procure particular information regarding them, as they have never been noticed by any writer.

BULLETIN
OF THE
AMERICAN ETHNOLOGICAL SOCIETY.

Vol. 22, 1863

AT the January meeting of the American Ethnological Society (held at the residence of CHAS. WELFORD, Esq., Dr. J. W. FRANCIS in the chair), after some preliminary business, a letter was read from Dr. JOHN C. EVANS, of Pemberton, New Jersey, respecting the stone implement of which he had sent to the Society an account at the last meeting :—

“TO THE OFFICERS OF THE AMERICAN ETHNOLOGICAL ASSOCIATION :

“January 1, 1859.

“GENTLEMEN :

The sculptured Indian stone axe, or wedge, which is offered by me for your inspection, was found near the north branch of the Rancocos Creek in Pemberton township, Burlington county, New Jersey. It was plowed up last September, on the farm of Samuel R. Gaskell (a near neighbor of mine), in a field that has been a long time under cultivation. It attracted the attention of the finder by the curious characters on its surface (the finding of the usual Indian relics being of too frequent occurrence to excite any special interest). Unluckily, he, or some one of the family, attempted to render the characters more distinct by increasing the depth of the original marks, a fact much to be regretted; but portions of the letters, and nearly all their outer edges have not been disturbed, and afford evidence of their antiquity. It has been in the possession of none but Mr. Gaskell and myself, and I fully believe his statement. He is a man of high moral character and principles, unacquainted with the controversies or in-

terest connected with similar discoveries, and I know of no one in the neighborhood (possessing the ability) who would attempt the perpetration of an imposition of such character. I have neither seen nor heard of any inscription found in this section; and yesterday saw, for the first time, a copy of the inscription on the stone found in the Grave Creek Mound!

"Anticipating the distrust, and dreading the ridicule with which a public announcement of the discovery of this relic might be received—knowing that a similar article has been in the estimation of some "*Lapis offensionis, et petra scandali*"—I had almost determined not to make any; but, believing that it will be received by your learned Association with a generous confidence in all the outside testimony I can offer respecting it, and trusting it is worthy of your attention, I submit it to your decision.

"I am, with much respect,

"Yours, &c.,

(Signed)

"JOHN W. C. EVANS,

"Pemberton, N. J."

Dr. Davis, to whom the subject had been referred, exhibited the relic to the members, remarking that the discovery of other stones with sculptured characters, whether resembling or not those of the Grave Creek Tablet, adds great interest to the subject, especially since the elaborate paper of Dr. De Hass, read before this Society, which seems to establish the authenticity of finding that tablet in the Grave Creek Mound.

Upon a careful examination of the lines of the inscription on the stone in question, he found the edges usually exhibiting the brown, decomposed appearance of the general surface, whilst the central part of some of the characters showed the evidence of recent efforts at deepening them with some sharp instrument (as stated by the owner).

The characters are twelve in number—no two alike (with the exception of three which seem to be a repetition of the Roman numeral I.). They average over an inch in length and one six-

teenth in depth, and are artistically and smoothly wrought. Four of them bear some resemblance to characters on the Grave Creek stone. Not accurate enough to be copies, yet may belong to the same alphabet or system.

The custom of inscribing upon implements, was not only common among Eastern nations (as the Egyptians and Chinese), but has been found to prevail amongst the semi-civilized nations of this continent. Humboldt has both described and figured an Aztec hatchet (made of compact jade and covered with hieroglyphics), which he obtained in Mexico, and deposited in the King's Cabinet, Berlin.*

The Recording Secretary read a brief report of the result of his observations on the inscription :

“While exercising extreme care in admitting external, in cases of this kind, where errors are so frequently and so easily made, we must not overlook internal evidence, where such is offered. Among the twelve or thirteen distinct characters on the stone exhibited by Dr. Evans, we have several which are identical with certain of Phœnician origin or derivation, chiefly Numidian, allowing for inverting or reversing, while some others resemble simple or combined characters of the same class. In one case, the collocation of several characters affords additional evidence, for we find XIII., an oblique cross with three upright straight lines on the right of it, which is a highly important expression in Gesenius's Numidian Inscriptions, plates 21 and 24, as interpreted by him.

“Although there are fewer points of interest in this inscription than in that of Grave Creek, they are of similar kinds, and give room to hope that future investigations, made with additional light, may lead to something important.”

* Since the above was reported to the Society, two other stones with sculptured characters have been found—one in the State of Indiana, the other in New York. A sketch of the latter is herewith inclosed.

MEETING, *May 22d, 1860.*

The May meeting was held on Tuesday, May 22d, at the rooms of Professor E. H. Davis, in the New York Medical College, the President, Hon. George Folsom, in the Chair. Much attention was given by the members at the beginning and the close of the evening, to the large and unequalled collection of American antiquities belonging to Dr. Davis, and principally obtained during the excavations and explorations of the Western Mounds, made by him and Mr. Squier. These, with many others received from different places and sources, were displayed to great advantage, in admirable order, and afforded the Society an opportunity the better to appreciate the results of the investigation made in our ancient tumuli, which have been so well described and illustrated by the work published by the Smithsonian Institution ten or twelve years ago: "*The Monuments of the Mississippi Valley*, by E. H. Davis and E. G. Squier."

The President informed the Society that the Librarian, Mr. Moore, had procured a very curious collection of massive golden ornaments, found in Chiriqui, on the Isthmus, which he would exhibit at the next meeting.

Mr. Ewbank, the Treasurer, exhibited a small rude figure of a man, made of pure sheet-gold, found, with a number of others, in one of the Chincha Islands. Mr. Ewbank read the following paper on the subject, which he had written by request, and accompanied with drawings:

NEW YORK, May 5.

To Theodore Dwight, Esq., Rec'g. Sec'y. Am. Eth. Society:

DEAR SIR,—The Peruvian relics here figured (of the full size) are of fine gold. They were sold, about a year ago, to Messrs. Trevor & Colgate, bullion-dealers in Wall street, to whose politeness the Society is indebted for an opportunity of examining them. They formed a small part of a quantity of kindred things discovered on one of the Chincha Islands by

Coolies, while engaged in digging guano. The rest were seized by the Peruvian officials.

Fig. 1 is the representation of a man, cut out of a thin and flat piece of metal. A ruder attempt at the human figure is scarcely conceivable. The nose and eyes have been raised or embossed by rough punches, and are so exaggerated as to give the face the appearance of that of an owl. What is meant for the head-dress is indicated by a slit at each side of the head. The arms are distinguished from the body in the same way, and a piece removed from between the legs leaves those members apart; the whole forcibly reminding one of anomalous paper figures cut out by children. There are small holes at *a, a*, as if to attach it to some fixed object by pins, or possibly for suspending it by twine.

Fig. 2 is a part of the same piece, bent below into a rude tube. It was broken off by accident or design. The habit of American Indians of turning the toes inwards, is clearly shown. The edges of Fig. 1 are excessively ragged, having been cut, no doubt, by stone chisels. They afford another corroboration of the alleged absence of anything like shears in ancient Peru, and of the admiration of the native when the Spaniards introduced scissors among them.

Figs. 3 and 4, are cups, raised out of thin metal by the hammer, the marks of which are as observable on the convex surface of No. 4 as if just made. The edge has been leveled and smoothed off by abrasion. The weight of Fig. 1 is slightly less than that of twelve gold dollars; and Figs. 3 and 4, of five dollars.

But the most interesting fact in relation to these trifles, is that of their having been disinterred on a Guano Island, *with thirty feet or more of that material resting upon them*. How many ages did it require to produce this depth of covering? What the annual or centennial rate of increase is now, we know not; but if it were known, it would scarcely be applicable to remote times, when the birds were seldom disturbed by human visitors. The Peruvians, under the Incas, used guano as a fertilizer; and from the place of their discovery, these relics doubtless date back to

an early period of Peruvian annals. From the excessive rudeness of form and finish of the principal one, it may well be supposed to have preceded the advent of the first Inca.

Mr. Farris, the owner of the collection of antiquities reported on at the last meeting of the Society, informs me that he has been on the Chincha Islands, and has seen golden relics found on them, especially on Chincha Alta, the largest and highest one. They are always found, he showed, on the *rock*, that is, beneath the lowest stratum of guano. Hence, they were either placed there before that material began to accumulate, or on spots that had been cleared of it, and left until buried under the present deposit.

Very respectfully,

THOMAS EWBANK.

Dr. Davis remarked that the ancient Peruvians obtained guano for manure from the Chincha Islands, and had laws strictly regulating its distribution in different provinces, and protecting the birds. He suggested that, as they had only small vessels, they probably dug the guano from near the water-level, and that the curious relics found may have been deposited in the excavation, and not before the period when the formation of the guano beds was commenced. Dr. Davis laid before the Society *Garcilasso de la Vega's book* ("Royal Commentaries on Peru," London, 1688), and from pages 135-6, was read the following: "By the sea coast of Orequipa, as far as Tarrapaca, which is above 200 leagues, they use no other dung but such as comes from the sea-birds, of which there are great numbers, and incredible flocks on the coast of Peru; they breed in little islands which lie in the sea, and are uninhabited, where they lay such heaps of dung, and at a distance they seem to be hills of snow. In the time of the Incas, who were kings, great care was taken of those birds in the season of their breeding, for then, on pain of death, no man was to enter on those islands, lest they should disturb the birds or rifle their nests; nor was it lawful to take or kill them at any time, either off or on the island.

“Every island was, by order of the Inca, assigned to such and such provinces; and if the islands were very large, then two or three of them divided the soilage, the which they laid up in separate heaps, that some one track might not encroach on the proportion allotted to the other; and when they came to make their division to particular persons and neighbors, they then weighed and shared out to every man the quantity he was to receive; and it was felony for a man to take more than what belonged to him, or to rob or steal it from the ground of his neighbors, for in regard that every man had as much as was necessary for his own lands, the taking a greater quantity than what belonged to him was judged a crime and high offence; for that this sort of birds’ dung was esteemed precious, being the best improvement and manure for land in the world.”

Dr. Davis then exhibited to the Society some articles which he thought possessed great interest—as they not only illustrated the high skill of the present tribes, but verified the statements of some of the early historians respecting the manufacture of obsidian knives and arrow-points, which statements have generally been considered rather apocryphal. For instance, Clavigero states, that so skillful were the Mexicans in the manufacture of obsidian knives, that a single workman could produce a hundred per hour.

The articles consisted of two obsidian pebbles—one in the natural state, the other fractured and polished—a block of the same, from which knives had evidently been fractured—two obsidian darts, one partly finished, the other complete, together with chips of the same materials. They were brought by the Hon. Caleb Lyon, recently returned from California. Whilst there he visited the Shasta Indians, and ascertained that they still used those weapons, which in most tribes have been superseded by rifles, or, at least, by iron-pointed arrows or spears. He found a man who could manufacture them, and saw him at work at all parts of the process. The description, which Mr. Lyon wrote and communicated to Dr. Davis, is here subjoined:

“The Shasta Indian seated himself upon the floor, and laying the stone anvil, which was of compact talcose slate, upon his

knee, with one blow of his agate chisel he separated the obsidian pebble into two parts, then giving another blow to the fractured side, he split off a slab some fourth of an inch in thickness. Holding this piece against the anvil with the thumb and finger of the left hand, he commenced a series of continuous blows, every one of which chipped off fragments of the brittle substance. It gradually assumed the required shape. After finishing the base of the arrow-head (the whole being only a little over an inch in length) he began striking gentler blows, every one of which I expected would break it into pieces. Yet such was their adroit application, and his skill and dexterity, that in little over an hour he produced a perfect obsidian arrow-head. I then requested him to carve me one from the remains of a broken porter-bottle, which (after two failures) he succeeded in doing. He gave as a reason for his ill success, he did not understand the grain of the glass. No sculptor ever handled a chisel with greater precision, or more carefully measured the weight and effect of every blow, than this ingenious Indian, for even among them arrow-making is a distinct trade or profession, which many attempt, but in which few attain excellence. He understood the capacity of the material he wrought, and before striking the first blow, by surveying the pebble, he could judge of its availability as well as the sculptor judges of the perfectness of a block of Parian. In a moment, all that I had read upon this subject, written by learned and speculative antiquarians, of the hardening of copper for the working of flint axes, spears, chisels, and arrow-heads, vanished before the simplest mechanical process. I felt that the world had been better served, had they driven the pen less and the plow more!"
